

DESCRIPTIONS OF NEW ACULEATE HYMENOPTERA.

BY WM. J. FOX, PHILADELPHIA.

PISONOPSIS gen. nov.

Form stout; sculpture coarse; head as broad as or slightly broader than the thorax, in the ♂ it is distinctly broader; mandibles distinctly notched on outer margin; eyes reaching to the base of mandibles, their inner margins converging a little towards the vertex and rather strongly emarginate at about the middle, in the ♂ they are but slightly emarginate; ocelli round, regular and distinct placed in a triangle; antennae ample, placed immediately behind the clypeus; shoulder tubercles not reaching to tegulae; metathorax a little shorter than the dorsulum; marginal cell long, but not reaching beyond the tip of third submarginal, obtuse at tip, without appendiculation; three submarginal cells, the first more than two times longer than the other two combined, the second petiolated, generally though not always, receiving both recurrent nervures, third submarginal narrow, wider below than at the top; discoidal vein confluent with the interno-medial vein; stigma short, truncate at tip; legs very feebly armed, the anterior tarsi without comb, middle tibiae with a single strong spur at apex, tarsal claws entire; last dorsal segment of the ♀ with a distinct pygidial area, in the ♂ the last ventral segment roundly emarginate at apex.

From *Pison* it is distinguished by the emarginate mandibles, the last dorsal segment of ♀ with a pygidial area, its more robust form and its coarse sculpture. From the other *Larrid* genera that have the eyes emarginate, i. e. *Aulacophilus* and *Trypoxylon*, the form of the abdomen will at once separate it.

Pisonopsis clypeata. ♀.—Clypeus convex medially, with large, scattered punctures, produced anteriorly into a strong medial tooth, at the base of the tooth the clypeus is transversely impressed; front with close, rather coarse punctures, with a distinct, medial, impressed line; ocelli slightly pitted, forming an equilateral triangle; top of head and cheeks shining, more finely punctured than the front; first joint of flagellum a little shorter than the second which is longer than the third, dorsulum with distinct punctures, those on the anterior portion finest and closest; scutellum punctured like hind portion of dorsulum; metathorax on sides and posteriorly with coarse striations, the upper surface with a somewhat triangular enclosure, which is on basal portion obliquely ridged, on apical portion transversely ridged; legs strong, the tibiae and tarsi with a very few weak spines; wings subhyaline, iridescent, the apical margins darker, recurrent nervures generally received by the second submarginal cell; in one specimen the first recurrent nervure is confluent with the first transverse-cubital nervure; abdomen finely, though distinctly punctured, the second and third dorsal segments rather strongly transversely depressed basally; pygidial area triangular, finely and closely punctured; black, the abdomen rufous; sides of face, clypeus, sides of thorax more or less and the apical margins of abdominal segments 1-5, silvery. Length 9 mm.

♂.—Eyes scarcely emarginate within and converging but little towards the vertex; ocelli situated in a low triangle, the distance between the hind pair more than twice greater than the distance between them and

the nearest eye-margin; antennae shorter than in the ♀, joints 1-6 of the flagellum produced into a strong angle or tooth beneath, joints 1-4 much narrowed basally; from joint six the flagellum gradually tapers to the apex; apical portion of abdomen blackish; last ventral segment of abdomen roundly emarginate at apex. Length 7 mm.

Nevada (Morrison). Four specimens.

PLENOCULUS gen. nov.

Eyes within not emarginate, distinctly converging towards the clypeus; the ocelli round and prominent; antennae short and stout, originating immediately behind the clypeus; head transverse, wider than the thorax; outer edge of mandibles strongly emarginate; palpi rather prominent, the maxillary palpi 6-jointed, the labial palpi 4-jointed; in the ♂ the clypeus has on each extreme side a fringe of hairs as in *Cerceris*; pronotum lower than the level of the dorsulum; metathorax distinctly shorter than the dorsulum; legs stout, the femora narrower at apex than at the base; four hind tibiae and tarsi strongly armed with spines, those on the anterior tarsi forming a weak comb; tibial spurs large and strong, the hind tibiae two-spurred, the others with but one spur; tarsal claws long and slender, not toothed, in the ♂ much smaller; marginal cell at apex obliquely truncate, with a distinct appendiculation; three submarginals, of which the first is nearly twice as long as the other two combined, the second petiolate, the third is oblique and is slightly narrowed above, the first recurrent nervure received by the first submarginal cell near its apex, the second by the second submarginal cell between its middle and apex, the discoidal and basal nervure meet at a short distance from the apex of the submedian cell, this cell being therefore shorter than the median cell on the externo-medial nervure; stigma small, scarcely distinguishable from the costal nervure; abdomen shaped as in *Oxybelus*; last dorsal segment ♀ with a distinct pygidial area.

This genus seems to be most closely related to *Tachyrhostus* Saussure from Australia; it is, however, different in the fact that it is not at all metallic in color, the head being broader than the thorax, the wide emargination of the mandibles, the narrow vertex. From *Bothynostethus* it is distinct by the eyes converging towards the vertex, the marginal cell with an appendiculation, and the hind femora being not broadened at the apex, etc.

It may be that this is the genus described by Patton, from New York,* but his description, "Second submarginal cell petiolate," is of no value as some half a dozen genera of the *Larriidae* possess that character. *Plenoculus* is also distinguished from *Sylaon* and *Solierella* in possessing a pygidial area and by the legs being strongly armed.

Plenoculus davisii. ♀. — Anterior margin of clypeus deeply incised, armed with five teeth on each side, the outer and inner tooth is generally the largest, the others being in some specimens indistinct; front very finely granulated, with a long, distinct, medial impressed line, which originates in a strong fovea, before the anterior ocellus and extends down between the base of the antennae; ocelli forming a triangle; on each side of anterior portion of vertex there is a curved furrow, running from each hind ocellus to the inner eye-margin; first joint of flagellum possibly a little shorter than either the second or third, which are a little longer than any of the following joints, except the last; dorsulum and scutellum with very fine, close punctures, both strongly convex; suture between dorsulum and scutellum strong; metathorax above very finely granulated, rather strongly furrowed down the middle, the extreme base generally with a transverse series of small fossae, sides and posterior face very finely striated; abdomen finely and closely punctured, the pygidial area triangular, with large, sparse punctures, its lateral ridges not well defined; black; clypeus,

* Entomological news, iii, p. 90.

except apex, tegulae, four anterior tibiae on outer side, the hind tibiae on outer side except apical portion, yellowish; tarsi and apical margins of the abdominal segments testaceous; wings hyaline, iridescent; nervures testaceous; apical abdominal segment more or less rufous; head, thorax and abdomen more or less covered with silvery pile, which is most dense on the face, clypeus, mesopleurae and metathorax. Length 5-6 mm.

VAR. legs, except anterior tibiae, entirely black.

♂. Anterior margin of clypeus slightly produced medially; antennae shorter than in the ♀ and sub-clavate; clypeus entirely, scape beneath, tegulae, tubercles, apex of femora, the tibiae, except inner side of two anterior pair, and the tarsi, bright yellow. Length 4½-5 mm.

Agricultural College, Michigan (June and July). Collected by Mr. Gager C. Davis, to whom it is dedicated; Montana (Morrison). Coll. Amer. Entom. Society.

Niteliopsis plenoculoides. ♀.—Clypeus strongly carinated down the middle; front finely granulated, distinctly impressed down the middle, along the inner eye margins the front is finely punctured; eyes strongly converging to the top, the space between them at the vertex is about equal to one-half of the space at the clypeus; ocelli in a triangle, the lower one situated a little further away from the hind pair, than the latter are from each other; from each hind ocellus there extends down a short furrow, which reaches a little beyond the fore ocellus; antennae tolerably long, reaching to about the tegulae, the flagellum tapering on apical half; joints 2 and 3 of the flagellum longest, the first and fourth about equal; dorsulum with exceedingly close and fine punctures; metathorax above and on the sides finely granulated, with indistinct striations when viewed in certain positions; at the extreme base of upper surface there is a transverse series of small fovea and down the middle there is an im-

pressed line (this is not distinct in one specimen), the posterior face transversely rugose; tibiae and tarsi, with exception of the calcaria unarmed; tarsal claws rather short, stout and not toothed; abdomen elongate-ovate, the first three dorsal segments when viewed from the side are seen to be contracted basally and apically; last dorsal segment without a pygidium; three submarginal cells, the second petiolated, receiving both recurrent nervures; black; two transverse spots on the collar above, posterior half of tubercles, a spot near the middle of hind tibiae and the tibial spurs, whitish; apex of mandibles, tegulae and tarsi, testaceous; wings subhyaline; nervures black; face and clypeus, sides of thorax and abdomen, more or less, with silvery pile. Length, 6 mm.

New York; Colorado. In general appearance this species resembles *Plenoculus davisii* but the abdomen is differently shaped, the antennae are longer, the legs without spines, the second submarginal cell receiving both recurrent nervures and the last dorsal segment lacks a pygidial area. It seems to me that Kohl has erred in uniting *Niteliopsis* Saund., with *Solierella* Spin.* A comparison of the figures of these genera,† is, I think, evidence enough that they are not the same; while the species herein described agrees with the description and tolerably well with figure of *Niteliopsis* it does not agree with Kohl's description, nor Spinola's figure of *Solierella*. As nothing definite can be ascertained to show whether these genera are synonymous or not without an examination of Saunders's type, it seems best for the present to consider them distinct. But one other species of *Niteliopsis* is known and is from the Ionian Islands. The single species of *Solierella* inhabits Chili.

* Verh. zool.-bot. gesellschaft. Wien. xxxiv, p. 207, 1884.

† *Solierella* Spin. Gay's Hist. Chile. Zool. tab. ii, figs. 5 a, b, c, *Niteliopsis* Saund. Trans. ent. soc. Lond., 1873, p. 410.

Cerceris austrina. ♀.—Clypeus subconvex, not produced, its fore margins rounded or subtruncate, strongly punctured, its lateral lobes small and indistinct; front, vertex and cheeks with coarse punctures, those on the cheeks strongest; inner eye-margins slightly converging towards the clypeus; ocelli placed in a low triangle; antennae tolerably long, thickened but little to the apex, first joint of the flagellum about one-quarter longer than the second, joints 2-4 about equal in length; thorax very coarsely punctured, the punctures on the mesopleuræ irregular; sides of prothorax somewhat excavated or depressed; mesopleuræ armed with two strong teeth beneath; enclosure on metanotum triangular, parted by a strong furrow which runs the entire length of the metathorax, and with a number of both oblique and transverse ridges; tibiae and tarsi strongly spinose, the hind tibiae very distinctly serrated on outer edge; the spines on fore tarsi forming the comb rather short and widely separated; dorsally the abdomen is less strongly punctured than the thorax, segments 1-5 reflexed at apex; ventrally the base and apex of segments 2-5 are impunctate; pygidial area almost exactly ovate, having the appearance of being scaly; black; clypeus, sides of face, scape beneath, basal half of mandibles, four anterior tibiae and tarsi in part a transverse mark on pronotum, separated in the middle, and scutellum yellow; greater part of antennae, pronotum, tegulae, legs, postscutellum, first abdominal segment above, second and third segments, except basal portions, rufous, apical portion

of second dorsal segment, yellow; face and clypeus clothed with pale silvery pubescence; head, thorax, and abdomen ventrally, with pale fuscous hair; wings fuscous, nervures testaceous. Length $11\frac{1}{2}$ mm.

♂.—Middle lobe of clypeus somewhat pyriform, its anterior margin seemingly tridentate, in consequence of its middle portion being angularly produced; head coarsely punctured, the punctures on front, vertex and cheeks deepest; antennae longer than in the ♀, second joint of flagellum a little longer than either the third or fourth; mesopleuræ not dentate; wings subfuscous darker towards apex; pygidial area coarsely punctured; eighth ventral plate bifurcate; colored like the female, except that the face and clypeus is entirely yellow, and dorsal abdominal segments 2-5 have generally a narrow, yellow fascia at apex, the first and second segments are both above and beneath generally rufous; in some specimens the second segment has no trace of rufous, while in others the first three segments are more or less marked with that color, apical half of antennae black. Length 10-12 mm.

So. Florida (Chas. Robertson). 1 ♀ and 15 ♂ specimens. Allied to *verticalis* Smith, but differs in the less coarse sculpture, the roughly and many ridged enclosure on metanotum (in *verticalis* it is smooth) and the somewhat stouter antennae. It resembles *verticalis* very much, but the want of the rufous color on vertex and metathorax will generally distinguish it. It is larger than *rufopicta* more coarsely sculptured and the flagellum is not so much thickened on apical portion.

A CORRECTION.—In *Psyche* 1893 (v. 6, p. 379) I described larvae received from Mr. J. B. Lambert as *Arctia blakei* Grote. Since then Mr. Lambert has sent a second specimen, like the one from which the eggs were obtained except that the veins of fore wings are narrowly lined with flesh color. This leads me to believe that the larvae described were really those of *A. ornata* Pack. and the varietal name proposed by me will not stand.

The synonymy will be:—

EYPREPPIA (CALLARCTIA) ORNATA Pack.

simplicior Butl.

perpicta Dyar.

var. ACHAIA G. & R.

edwardsii Stretch.

var. COMPLICATA Walk.

‡*dakurica* Grote.

ochracea Stretch.

barda Hy. Edw.

Harrison G. Dyar.